Section I. Executive Summary and Healthy People Objectives Table

The mission of the Maricopa County Department of Public Health (MCDPH) is to promote, preserve, and protect the health of the people and communities in Maricopa County. To better understand the health needs of mothers, children, and families in Maricopa County and to identify communities and population groups in need, an annual Needs Assessment of Maternal and Child Health (MCH) is prepared. Existing county resources fund the production of a detailed Needs Assessment. The County Perinatal Block Grant (CPBG) received from the Arizona Department of Health Services (ADHS) supports the printing and dissemination of the Needs Assessment.

At the request of the South Phoenix, Maryvale, and Garfield neighborhoods, all located in the city of Phoenix, the 2001 Maternal and Child Health Needs Assessment is an analysis of these three geographic areas, as well as an update of Maricopa County data. For a full assessment of Maricopa County MCH data, please refer to the 2000 Maricopa County MCH Needs Assessment, located on the worldwide web at "http://www.maricopa.gov/public_health/epi.asp." This year's, 2001 MCH Needs Assessment and the supplemental data tables are also located on the same website.

The South Phoenix, Maryvale, and Garfield communities have developed a level of collaboration among individuals, neighborhood groups, and agencies that is making it possible to implement community interventions that can potentially impact reproductive outcomes. The intent of this Needs Assessment is to provide the information that will guide coalition and community members, elected officials, government agencies, and other decision makers in policy and program development and in the deployment and allocation of resources to support community interventions. The areas of focus in each of the three areas include demographic information, an overview of birth statistics, infant mortality, low birthweight and preterm births, prenatal care, teenage pregnancy and substance use.

In an effort to improve the health of the South Phoenix community and eliminate health disparities, MCDPH initiated the Pregnancy Risk Assessment Monitoring System (PRAMS) and applied the Perinatal Periods of Risk (PPOR) approach for the investigation of infant mortality. PRAMS is a surveillance system developed by the Centers for Disease Control and Prevention (CDC) that surveys women who have recently delivered a baby. The PPOR approach, developed by the World Health Organization (WHO), is a means of identifying, for a community, the points in time during the prenatal period when interventions would be most effective in improving birth outcomes and infant health.

KEY FINDINGS:
MARICOPA COUNTY

- The population of Maricopa County grew 7.4% to a population of 3,072,149 between 1999 and 2000[1,2].
- In 2000, there were 54,471 live births in Maricopa County, a 5.7% increase over the 51,535 births in 1999.
- Women of Hispanic ethnicity had the highest fertility rate in 1999 (150.5 births/1,000 women 15-44 years of age); countywide, the birth rate was 83.2.

- Infant mortality in Maricopa County during 1999 was higher than both the state and national rates, at 7.3 infant deaths per 1,000 live births (Arizona, 6.8; United States, 7.1) [3,4,5]. This represents 374 infant deaths for 1999 in Maricopa County.
- Teen fertility rates in the state for the years 1997 to 1999 were revised in May 2001[6,7], reflecting a much less dramatic decrease in teen birth rate for the state than previously reported.
- Maricopa County's teen fertility rate remains higher than both the U.S. and Arizona's teen fertility rate (MC, 79.3 teen births per 1,000 females under the age of 20; Arizona, 75.0; U.S. 1997 data, 52.3) [6,8].

KEY FINDINGS:
SOUTH PHOENIX

- There were 6,571 births to South Phoenix residents in 1999, an increase of 6.8% from the previous year. This represents 12.75% of all county births in 1999.
- The majority of women delivering in South Phoenix during 1999 had less than a twelfth grade education (59.9%) compared with 29.8% countywide.
- AHCCCS paid for the largest proportion (68.2%) of the births in South Phoenix during 1999, followed by private insurance (21%). The opposite was true in Maricopa County; the largest payor was private insurance (53.8%), followed by AHCCCS (39.7%).
- Unintended pregnancies accounted for approximately 50% of the births in the South Phoenix PRAMS pilot. Of the unintended pregnancies, approximately 39% were mistimed (wanted but not at that time) and 11% were unwanted (not wanted at any time).
- Approximately 10% of women surveyed indicated that they experienced some form of physical abuse during or around the time of pregnancy, with 8.8% experiencing abuse before pregnancy and 5.1% during the pregnancy (PRAMS).
- Infant mortality rates in South Phoenix rose from 9.5 deaths per 1,000 live births in 1996 (59 deaths) and 6.5 in 1998 (40 deaths) to 10.65 in 1999 (70 deaths). The deaths in 1999 represent 19% of the 374 infant deaths in Maricopa County during 1999.
- Approximately 40% of the infant deaths in South Phoenix were post-neonatal (28 to 365 days of age). This proportion is higher than county and national averages where about 1/3 of infant deaths occur in the post-neonatal period.
- The total feto-infant mortality rate for South Phoenix was 11.5 whereas it was 6.5 for the reference group (Maricopa County white women who delivered at 20 or more years of age and had more than a twelfth grade education).
- According to the Perinatal Periods of Risk analysis, the largest contributors to excess feto-infant mortality in South Phoenix were factors related to prematurity and maternal health.
- Among African Americans, infant health factors were the greatest contributors to feto-infant mortality in South Phoenix.
- Low birth weight (< 2500 grams) and preterm births (< 37 weeks) both were approximately one percent higher in South Phoenix than countywide during 1999.
- According to the Adequacy of Prenatal Care Utilization Index (APNCU) [9], 28% of the women delivering in South Phoenix during 1999 had inadequate prenatal care utilization, compared to 14.6% in the county as a whole.

- The most frequent reason (18.8%) cited among South Phoenix residents for not receiving prenatal care as early as desired was a lack of money or insurance (PRAMS).
- Approximately 30% of the births to women 15-17 years of age were intended, while approximately 40% of the births to women 18-19 were intended.

KEY FINDINGS:
MARYVALE NEIGHBORHOOD

- In 1999, there were 3,781 births in Maryvale, an increase of 5.4% from 1998. This represented 7.3% of the 51,535 births in Maricopa County in 1999.
- The majority of women delivering in Maryvale during 1999 had less than a twelfth grade education (51%), compared with 29.8% countywide.
- AHCCCS paid for the largest proportion (64.5%) of the births in Maryvale in 1999, followed by private insurance (27.7%). In Maricopa County, the largest payor was private insurance (53.8%), followed by AHCCCS (39.7%).
- Maryvale had a higher infant mortality rate during each of the four years (1996-1999) compared to the county, with a rate of 8.2/1,000 live births in 1999, representing 31 infant deaths.
- Although the overall percent of infant deaths that occurred during the post-neonatal period (28-365 days of age) was only slightly higher in Maryvale (36.5%) than the county (approximately 1/3), post-neonatal deaths represented 52% of the infant deaths for White women and 47% of those to African American women (1996-1999).
- The percentage of low birth weight births in Maryvale decreased from 7.6% in 1998 to 6.9% in 1999, while county-wide, the percent of low birth weight births increased from 6.7% to 7%.
- According to the APNCU Index [9], there was a decrease in the percentage of mothers with less than adequate prenatal care utilization in Maryvale from 1996 (33.3%) to 1999 (28.9%). The 1999 rate, however, was still higher than the rate in Maricopa County (24.8%).
- Women with 12 years education or less were less likely to have utilized adequate prenatal care than those with more than 12 years of education.
- From 1996 to 1999, 21.3% of the births in Maryvale were to teen mothers, whereas 13.7% of the births in Maricopa County were to teen mothers (1999).

KEY FINDINGS:
GARFIELD NEIGHBORHOOD

- There were 534 births in Garfield during 1999 representing just over 1% of the births in Maricopa County. There were 2,184 births in Garfield from 1996 to 1999.
- Garfield consistently had a higher percentage of women with less than 12 years education delivering compared to Maricopa County (Garfield 66.9%, MC 29.8%, 1999).
- Approximately 83% of the births in Garfield from 1996 to 1999 were paid for by AHCCCS, compared with 39.7% countywide (1999).
- There were 5 infant deaths in Garfield in 1999 (an IMR of 9.3/1,000 live births). From 1996 to 1999, there were 19 infant deaths in Garfield, a four year IMR of 8.7.
- Women who had no prenatal care and women who entered prenatal care late in pregnancy had higher infant mortality

rates than women who entered prenatal care during the first trimester of pregnancy did.

- Approximately 53% of the infant deaths in Garfield during 1996-1999 were post-neonatal deaths. This is in contrast to both the county and national statistics where about 1/3 of infant deaths occur in the post-neonatal time period (28-365 days of age).
- Hispanics and African Americans in Garfield had a lower percentage of low birth weight births from 1996 to 1999 (5.6% and 10.3%, respectively) than their counterparts in the county as a whole (6.9% and 12.5%, respectively; 1999 data).
- Whites in Garfield had a higher low birth weight rate (12.9%, 1996-1999) than Whites across all of Maricopa County (6.6%, 1999).
- Maternal age did not seem to affect first trimester prenatal care initiation in Garfield, unlike patterns for the entire county and the United States, where the percentage increases across age groups up to women 34 years and then drops again for older women.
- A larger percentage of women residing in Garfield (5.4%, 1996-1999) than women residing in the county as a whole (1.9%, 1999) did not receive prenatal care prior to delivery.
- Women younger than 18 years of age in Garfield had birth rates almost three times higher than women of the same age did in the county as a whole.
- A lower percentage of teen mothers in Garfield had an age appropriate education level [10] (33%) compared to the county (48%).

KEY RECOMMENDATIONS

1. Implement the Pregnancy Risk Assessment Monitoring System (PRAMS) countywide. PRAMS is a CDC designed surveillance system that collects information about risk factors associated with poor reproductive outcomes. This will help in targeting intervention strategies and developing policy and allocating community resources.
2. Utilize findings from Perinatal Periods of Risk (PPOR) analysis of infant mortality to better match interventions and resource allocation with factors contributing most to infant mortality.
3. Significantly increase community-wide awareness of changes in AHCCCS benefits (i.e., Proposition 204, KidsCare, Premium Sharing), new perinatal substance abuse resources, and other services available. This awareness could potentially be achieved by a community campaign emphasizing the importance of receiving early prenatal care and preconception care. The campaign should specifically target providers, community-based organizations, and other community partners in geographic areas of the county identified as areas of concern.
4. Address the excessive disparities in infant mortality, preterm birth, and low birth weight rates between African Americans and all other racial/ethnic groups through further identification of risk factors, culturally appropriate interventions involving the community, and dedication of resources.
5. Continue with small area geographic analysis of MCH indicators to better understand the problems and to allow quick recognition of trends in Maternal and Child Health indicators. This will facilitate the implementation and evaluation of interventions at the community level.

6. Universal availability and accessibility of health education is imperative in improving maternal and child health indicators.
7. Implement policies and programs to assure the reduction of disparities in access to and utilization of health care (including prenatal and pre-conception care) between ethnic and racial groups, underinsured/uninsured groups, and geographic areas should take place.
8. The education community and the public health community should collaborate to address risk factors preventing completion of high school. One of the strongest determinants of maternal and child health is the educational level of the mother.
9. Target Hispanic and African American communities with culturally appropriate prevention, intervention, and education to address teen birth rates.
10. Public health agencies should take a lead role in addressing domestic violence and physical abuse as a continued and growing threat to the public health.

Comparison of Selected Maternal and Child Health Indicators in Maricopa County, Arizona with Healthy People 2000 and 2010 Objectives

			Maricopa County			Three Geographic Areas			
Indicator[1]	Healthy People 2000 Objectives	Healthy People 2010 Objectives	Year	Statistics	Status	Year	South Phoenix	Garfield Neighborhood	Maryvale Neighborhood
Number of Births	None available	None available	1999	51535		1999	6571	534 (99), 2,184 (96-99)	3781
Number of Deaths (< 1 year of age)	None available	None available	1999	374		1999	70	5 (99) 19 (96-99)	31
Mothers with < 12 Years Education	None available	None available	1999	29.8%		1999	59.9%	73.2%	51.4%
Deliveries paid for by AHCCCS	None available	None available	1999	39.7%		1999	68.2%	79.2%	64.5%
Infant Mortality Rate	7	4.5	1999	7.26	●	1999	● 10.65	● 8.9 (96-99)	● 9.65
Neonatal Mortality Rate	4.5	2.9	1996-1998	4.79	●	1999	● 6.24	● 4.58 (96-99)	● 6.13
Post Neonatal Mortality Rate	2.5	1.5	1996-1998	2.21	●	1999	● 3.8	● 4.12 (96-99)	● 3.17
Sudden Infant Death Syndrome (SIDS)	None available	0.3	1998	0.64	●		NC	NC	NC
Low Birth Weight (<2,500 grams)	5.0%	5.0%	1999	7.03%	●	1999	● 6.4%	● 7.5%	● 6.9%
Very Low Birth Weight (<1,500 grams)	1%	0.9%	1999	1.3%	●	1999	● 1.8%	● 2.6%	● 1.3%
Preterm Births (<37 weeks)	None available	7.6%	1999	10.08%	●	1999	● 11.1%	● 10.9%	● 10.6%
No Prenatal Care	None available	None available	1999	1.9%		1999	4.4%	5.1%	2.5%
PNC Beginning in First Trimester	90%	90%	1999	75.8%	●	1996-1999	● 56.1%	● 50.5%	● 65.6%
Early and Adequate PNC	None available	90%	1999	68.2%	●	1999	● 47.8%	● 43.1%	● 61.2%
Adolescent Pregnancy Among 15-17 year olds[2]	50/1,000	43/1,000	1999	42.58/1,000 (<=17)	*	1999	103.5/1,000 (<=17)	142.5/1,000 (<=17)	87.5/1,000 (<=17)
Neural Tube defects (NTD)[3]	3/10,000	3/10,000	1996-1998	1.53/10,000	●		NC	NC	NC
Early Postpartum Breastfeeding	75%	75%		DNA	DNA	1999-2000	● 76.7%	DNA	DNA
Breastfeeding at 6 months postpartum	50%	50%		DNA	DNA	1999-2000	● 8.3%	DNA	DNA
Breastfeeding at 1 year postpartum	None available	25%		DNA	DNA	1999-2000	● 0.75%	DNA	DNA
Alcohol Abstinence	95%	94%	1999	97.69%	●	1999	● 97.6%	● 98.1%	● 97.5%
Cigarette Abstinence	90%	99%	1999	92.06%	●	1999	● 93.1%	● 93.3%	● 93.1%
Illicit Drugs[4]	100%	100%		DNA	DNA		DNA	DNA	DNA
Fetal Alcohol Syndrome (FAS)	0.12/1,000	Developmental	1996-1998	0.12	●		NC	NC	NC
Homicide	None available	3.0/100,000	1998	8.09/100,000	●		NC	NC	NC
Suicide	10.5/100,000	5.0/100,000	1998	12.7/100,000	●		NC	NC	NC
Unintentional Injury Deaths	29.3/100,000	17.5/100,000	1998	33.9/100,000	●		NC	NC	NC

[1]Unless stated otherwise, rates are per 1,000 live births.
[2]Fertility rates calculated per 1,000 females in specified age group.
[3]NTD rates were calculated from birth certificates, rate per 10,000 live births.
[4]1990 Objective was for abstinence from cocaine and marijuana.
*Incompatible denominator
NC = Not Calculated or insufficient data
DNA = Data Not Available

Status
● HP 2000 objective not met.
● HP 2000 objective met.
If a HP 2000 objective was not available, HP 2010 objectives were used.